

### **REMARKS/ARGUMENT**

An Advisory Action was mailed on November 1, 2004. The Advisory Action failed to state whether or not the After Final Amendment and Request for Reconsideration was entered.

Claims 1-9, and 33-35 are pending after entry of the present Amendment. Applicants herein amend claims 1, 3, 5-6, and 8, and submit new claims 33-35 for examination. Claim amendments primarily address form and format of pending claims and do not introduce new subject matter. New claims 33-35 recite claim features previously recited in claims 1 and 2. No new matter is introduced.

#### **Election/Restrictions**

Applicants acknowledge that the Office declines to examine newly submitted claim 32. The Office supports a different species rationale citing that the trench dielectric layer is not limited to carbon-doped silicon dioxide. Accordingly, the claim has been withdrawn.

#### **Rejections under 35 USC §103**

Claims 1-4, 10, 11, and 14-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Aoi (U.S. Patent No. 5,619,696), in view of Jang (U.S. Patent No. 6,110,648). This rejection is respectfully traversed, and Applicants request reconsideration.

Applicants have amended claim 1, the only remaining independent claim pending in the application, to claim a method for making a dielectric structure for dual-damascene applications. The claimed method is specified to include the following steps:

- (a) providing a substrate;
- (b) fabricating first metallization lines in the substrate;
- (c) forming a barrier layer over the first metallization lines and the substrate; and
- (d) forming an inter-metal dielectric structure.

The forming of the inter-metal dielectric structure is specifically recited to be consisting of:

(d)(i) forming an inorganic dielectric layer to define a via dielectric layer directly over the barrier layer, the inorganic dielectric layer being highly selective relative to the barrier layer when etched; and

(d)(ii) forming a carbon doped oxide layer to define a trench dielectric layer that is defined directly over and in direct contact with the inorganic dielectric layer, the

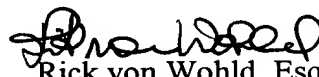
trench layer being formed to define a metallization line layer of the inter-metal dielectric structure.

The prior art of record neither teaches nor suggests the specific structure as claimed by Applicants. The patent to Aoi teaches a multi-layer interconnection structure having at least three layers, including a first silicon dioxide film 353A, an organic film 354A, and a second silicon dioxide film 355A. The patent to Jang teaches a multi-layer dual damascene structure formed of at least a lower layer dielectric 120a, and etch-stop layer 125, and an upper layer dielectric 120b.

Applicants respectfully submit that claims 1-9, as amended herein, and new claims 33-35, are patentable under 35 USC §103(a) over Aoi, in view of Jang, and request that the rejections of these claims be withdrawn.

In view of the foregoing, Applicants respectfully request reconsideration of claims 1-9, as amended herein, and examination of new claims 33-35. Applicants submit that all claims are in condition for allowance. Accordingly, a notice of allowance is respectfully requested. If Examiner has any questions concerning the present Amendment, the Examiner is kindly requested to contact the undersigned at (408) 749-6900, ext. 6905. If any additional fees are due in connection with filing this amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. LAM1P106A). A copy of the transmittal is transmitted herewith for this purpose.

Respectfully submitted,  
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